Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 14/07/2016 Revision date: 22/05/2017 Supersedes: 14/07/2016 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identif

Product form Mixture Trade name Det&Rinse ECO : DB1018A0 Product code

Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category Detergents Industrial/Professional use spec : Professional Use of the substance/mixture Oven cleaners

1.2.2. Uses advised against

Any use that is not described in this sheet and technical document is to be considered incorrect/not recommended

Details of the supplier of the safety data sheet

UNOX SpA VIA MAJORANA ,22 35010 Cadoneghe - Italy

T +39 049 86.57.511 - F +39 049 86.57.555 Det.Rinse@unox.it

1.4. Emergency telephone number

Emergency number (24h/24) : Tel. (+)1 760 476 3961

Tel (+)0-800-680-0425 (only UK)

Access Code: 334577

National Poisons Information Service (NPIS) Email: director.birmingham.unit@npis.org

Website: http://www.npis.org/

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Corrosive to metals, Category 1 H290 Skin corrosion/irritation, Category 1A H314

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

Signal word (CLP)

Hazardous ingredients : potassium hydroxide, caustic potash Hazard statements (CLP) : H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

Precautionary statements (CLP) P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water Take a shower

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P363 - Wash contaminated clothing before reuse

P501 - Dispose of contents and container to comply with applicable local, national and international regulation

2.3. Other hazards not contributing to the classification

No additional information available

SECTION 3: Composition/information on ingredients

Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
potassium hydroxide, caustic potash	(CAS-No.) 1310-58-3 (EC-No.) 215-181-3 (EC Index-No.) 019-002-00-8 (REACH-no) 01-2119487136-33	15	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314
Heptyl D-glucoside	(CAS-No.) 100231-64-9 (EC-No.) 309-364-8 (REACH-no) Not available	4 - 6	Eye Dam. 1, H318
Alkane C6-C8 (even numbered), 1-sulphonic acid, sodium salt	(EC-No.) 939-625-7 (REACH-no) 01-2119985168-23	1 - 2	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319
Oxirane, 2-methyl-, polymer with oxirane, mono(2- propylheptyl) ether	(EC-No.) 944-523-0 (REACH-no) Exempt	1.5	Skin Irrit. 2, H315 Eye Irrit. 2, H319

Specific concentration limits:

Name	Product identifier	Specific concentration limits
potassium hydroxide, caustic potash	(CAS-No.) 1310-58-3 (EC-No.) 215-181-3 (EC Index-No.) 019-002-00-8 (REACH-no) 01-2119487136-33	(0.5 = <c 2)="" 2,="" <="" eye="" h319<br="" irrit.="">(0.5 =<c 2)="" 2,="" <="" h315<br="" irrit.="" skin="">(2 =<c 1b,="" 5)="" <="" corr.="" h314<br="" skin="">(C >= 5) Skin Corr. 1A, H314</c></c></c>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Self-protection of the first aider.

First-aid measures after inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention immediately

First-aid measures after skin contact : Immediately rinse with plenty of water (for at least 15 minutes), Remove contaminated clothing

immediately and dispose of safely. Wash contaminated clothing before reuse. Seek medical

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes First-aid measures after eye contact

holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if

present and easy to do. Continue rinsing. Protect uninjured eye.

Immediately call a POISON CENTER or doctor/ physician. Never give anything by mouth to an First-aid measures after ingestion

unconscious person. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation : Corrosive to respiratory system. Causes burns

Symptoms/effects after skin contact : Causes severe burns.

Symptoms/effects after eye contact : Causes serious eye damage. Corneal opacity. Iris lesions.

Symptoms/effects after ingestion : Severe irritation or burns to the mouth, throat, oesophagus, and stomach.

4.3. Indication of any immediate medical attention and special treatment needed

Keep under medical supervision for at least 48 hours. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : Water fog. carbon dioxide (CO2), dry chemical powder, foam.

Unsuitable extinguishing media : Do not use water jet.

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5.2. Special hazards arising from the substance or mixture

Fire hazard : On burning: release of (highly) toxic gases/vapours.

Explosion hazard None known

Hazardous decomposition products in case of : On combustion forms: carbon oxides (CO and CO2).

Advice for firefighters

Precautionary measures fire Evacuate the personnel away from the fumes

Firefighting instructions Cool down the containers exposed to heat with a water spray. Move undamaged containers

from immediate hazard area if it can be done safely.

Protective equipment for firefighters Extra personal protection: complete protective clothing including self-contained breathing

apparatus.

Other information Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Wear personal protection equipment. Do not attempt to take action without suitable protective Protective equipment

Emergency procedures Immediately contact emergency personnel. Eliminate all ignition sources if safe to do so.

Spilled material may present a slipping hazard.

6.1.2. For emergency responders

Emergency procedures

Other information

Hygiene measures

Protective equipment Wear suitable protective clothing, gloves and eye/face protection. Do not attempt to take action

without suitable protective equipment. In presence of product's residue, total impervious

protective suits, gloves, and boots must be worn.

Evacuate unnecessary personnel. Eliminate all ignition sources if safe to do so. Spilled material may present a slipping hazard. Avoid inhalation of vapours. Ventilate affected area. Consult an

Environmental precautions

Avoid release to the environment. Avoid sub-soil penetration. Relevant water authorities should be notified of any large spillage to water course or

Stop leak if safe to do so. Recover small spills with a suitable absorbent, like diatomaceous For containment

earth. Recover large spills by pumping (use an explosion proof or hand pump) Methods for cleaning up Ventilate affected area. Wear personal protection equipment. Collect in closed containers for

disposal. Wash with plenty of soap and water. Consult the appropriate authorities about waste disposal. Wash contaminated area with large amounts of water.

Do not allow uncontrolled discharge of product into the environment.

6.4. Reference to other sections

For disposal of residues refer to section 13: "Disposal considerations". For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing mist or vapor . Keep away from sources of ignition - No smoking. Take any precaution to avoid mixing with Incompatible materials. Open and handle container with care. Ensure operatives are trained to minimise exposures. Avoid

formation of vapours

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

Conditions for safe storage, including any incompatibilities

Technical measures : Provide adequate ventilation.

Storage conditions : Store tightly closed in a dry, cool and well-ventilated place. Keep out of direct sunlight.

Incompatible materials : Acids, alkali, oxidizing agents, Flammable materials, Peroxides, : Keep away from open flames, hot surfaces and sources of ignition. Heat and ignition sources

Keep away from food, drink and animal feeding stuffs.

Storage area : Use explosion-proof lighting equipment.

7.3. Specific end use(s)

Information on mixed storage

No additional information available

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SECTION 8: Exposure controls/personal protection

Control parameters

potassium hydroxide, caustic potash (1310-58-3)			
Austria MAK (mg/m³)		2 mg/m³	
Belgium Short time value (mg/m³)		2 mg/m³	
Bulgaria	OEL TWA (mg/m³)	2 mg/m³	
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m³)	2 mg/m³	
Czech Republic	Expoziční limity (PEL) (mg/m³)	1 mg/m³	
Czech Republic	Expoziční limity (NPK-P) (mg/m³)	2 mg/m³	
Estonia	OEL TWA (mg/m³)	2 mg/m³	
Finland	OEL Ceiling (mg/m³)	2 mg/m³	
France	VLE (mg/m³)	2 mg/m³	
Greece	OEL TWA (mg/m³)	2	
Greece	OEL STEL (mg/m³)	2 mg/m³	
Hungary	AK-érték	2 mg/m³	
Hungary CK-érték		2 mg/m³	
Ireland OEL (15 min ref) (mg/m3)		2 mg/m³	
Poland NDS (mg/m³)		0.5 mg/m³	
Poland	NDSCh (mg/m³)	1 mg/m³	
Poland	NDSP (mg/m³)	2 mg/m³	
Spain	VLA-EC (mg/m³)	2 mg/m³	
Sweden nivågränsvärde (NVG) (mg/m³)		1	
Sweden	kortidsvärde (KTV) (mg/m³)	2	
United Kingdom	WEL STEL (mg/m³)	2	

8.2. Exposure controls

Appropriate engineering controls:

Provide adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

Personal protective equipment:

Safety glasses. Gloves. Protective clothing. An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits.

Materials for protective clothing:

Rubbers. PVC (Polyvinyl chloride). Natural fibres (e.g. cotton). EN ISO 20344

Hand protection:

Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Breakthrough time: > 480 min. Thickness of glove material: 0.4-0.5 mm. Chemical resistant gloves (nitrile-rubber, PVC, neoprene)

Eve protection:

Wear eye glasses with side protection according to EN 166. Do not wear contact lenses.

Skin and body protection:

Wear chemical resistant apron. EN 14605. Wear work clothes with long sleeves. EN ISO 20344

Respiratory protection:

An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits. Wear a respirator conforming to EN140 with Type A/P2 filter or better. EN 14387. Combination filtering device (DIN EN







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SECTION 9: Physical and chemical properties

nation on basic physical and chemical properties

Physical state : Liquid

Colour No data available Odour characteristic. Odour threshold : No data available рΗ : 13.5 at 24°C No data available Relative evaporation rate (butylacetate=1) Melting point : No data available : No data available Freezing point : > 100 °C Boiling point

: No data available Flash point Auto-ignition temperature : No data available Decomposition temperature : No data available : Not flammable Flammability (solid, gas) Vapour pressure No data available Relative vapour density at 20 °C No data available Relative density : No data available

Density : 1.1 - 1.25 kg/l Solubility : No data available Log Pow No data available : No data available Viscosity, kinematic No data available Viscosity, dynamic

Explosive properties Not explosive as none of the components is classified as explosive or oxidizing

Not oxidising. Oxidising properties Explosive limits : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts exothermically with (some) acids. Reacts with (strong) oxidizers.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal conditions

10.4. Conditions to avoid

Keep away from (strong) acids.

Incompatible materials 10.5.

Acids.

10.6. Hazardous decomposition products

None known under normal conditions of use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) Not classified

potassium hydroxide, caustic po	tash (1310-58-3)		
LD50 oral rat	333 mg/kg	333 mg/kg	
Alkane C6-C8 (even numbered), 1	-sulphonic acid, sodium salt		
LD50 oral rat	1550 mg/kg		
LD50 dermal rat	> 2000 mg/kg		
Skin corrosion/irritation	: Causes severe skin burns and eye damage.		
	pH: 13.5 at 24°C		
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Serious eye damage/irritation : Serious eye damage, category 1, implicit

pH: 13.5 at 24°C

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

: Not classified Reproductive toxicity

STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

: Not classified Acute aquatic toxicity : Not classified Chronic aquatic toxicity

potassium hydroxide, caustic potash (1310-58-3)		
LC50 fish 1	80 mg/l Gambusia affinis	
Alkane C6-C8 (even numbered), 1-sulphonic acid, sodium salt		
LC50 fish 1	10 - 100 mg/l	
EC50 Daphnia 1	10 - 100 mg/l	
EC50 72h Algae [mg/l] (1) 10 - 100 mg/l		

12.2. Persistence and degradability

potassium hydroxide, caustic potash (1310-58	3-3)	
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.	
Heptyl D-glucoside (100231-64-9)		
Persistence and degradability	Readily biodegradable.	
Biodegradation	82.52 % 28 days (OCDE 301F)	

12.3. Bioaccumulative potential

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Low bioaccumulation potential. Bioaccumulative potential

potassium hydroxide, caustic potash (1310-58-3)

Bioaccumulative potential No bioaccumulation

Heptyl D-glucoside (100231-64-9)

0.44 Log Pow

12.4. Mobility in soil

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Ecology - soil Expected to be highly mobile in soil.

12.5. Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

Reuse or recycle following decontamination. External recovery and recycling of waste should comply with applicable local and/or national regulations. Recycling is preferred to disposal or incineration.

Product/Packaging disposal recommendations

Dispose of this material and its container at hazardous or special waste collection point.

HP Code

HP4 - "Irritant — skin irritation and eye damage:" waste which on application can cause skin

irritation or damage to the eye.

HP8 - "Corrosive:" waste which on application can cause skin corrosion

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SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

in accordance with the Control of th				
ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1814	1814	1814	1814	1814
14.2. UN proper shipping	ng name			
POTASSIUM HYDROXIDE SOLUTION	POTASSIUM HYDROXIDE SOLUTION	Potassium hydroxide solution	POTASSIUM HYDROXIDE SOLUTION	POTASSIUM HYDROXIDE SOLUTION
Transport document descr	iption			
UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, II, (E)	UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, II	UN 1814 Potassium hydroxide solution, 8, II	UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, II	UN 1814 POTASSIUM HYDROXIDE SOLUTION, 8, II
14.3. Transport hazard	class(es)			
8	8	8	8	8
8		8		
14.4. Packing group				
II	II	II	II	II
14.5. Environmental ha	izards	1	1	1
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
	No s	upplementary information ava	ilable	

14.6. Special precautions for user

- Overland transport

Limited quantities (ADR) : 11 Excepted quantities (ADR) E2

Orange plates

80 1814

Tunnel restriction code (ADR) : E : 2R EAC code

- Transport by sea

Limited quantities (IMDG) : 1L Excepted quantities (IMDG) : E2 : F-A EmS-No. (Fire) EmS-No. (Spillage) : S-B

Properties and observations (IMDG) Colourless liquid. Reacts with ammonium salts, evolving ammonia gas. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts

violently with acids.

- Air transport

PCA max net quantity (IATA) : 1L

- Inland waterway transport

Classification code (ADN) : C5 Limited quantities (ADN) : 1 L

- Rail transport

Limited quantities (RID) : 1L

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

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Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Other information, restriction and prohibition regulations

: Regulation (EC) No. 648/2004 (Detergents regulation). Contains: 5% - 15 % non-ionic surfactants

Contains: < 5% anionic surfactants, amphoteric surfactants, phosphonates.

Seveso Information : None

15.1.2. National regulations

Germany

VwVwS Annex reference : Water hazard class (WGK) 1, low hazard to waters (Classification according to VwVwS, Annex

12th Ordinance Implementing the Federal Immission Control Act - 12.BlmSchV

: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen : Heptyl D-glucoside is listed SZW-lijst van mutagene stoffen : Heptyl D-glucoside is listed NIET-limitatieve lijst van voor de voortplanting : None of the components are listed

giftige stoffen - Borstvoeding

NIET-limitatieve lijst van voor de voortplanting : None of the components are listed

giftige stoffen - Vruchtbaarheid

NIET-limitatieve lijst van voor de voortplanting

giftige stoffen - Ontwikkeling

: None of the components are listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out

potassium hydroxide, caustic potash

SECTION 16: Other information

Abbreviations and acronyms:

SDS	Safety Data Sheet
303	CAS - Chemical Abstracts Service
	GHS - Globally Harmonised System
	CSR - Chemical Safety Report
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
	PVC (Polyvinyl chloride).
PNEC	Predicted No-Effect Concentration
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

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REACH Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No	1907/2006
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Other information

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Met. Corr. 1	Corrosive to metals, Category 1		
Skin Corr. 1A	Skin corrosion/irritation, Category 1A		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		
H290	May be corrosive to metals		
H302	Harmful if swallowed		
H314	Causes severe skin burns and eye damage		
H315	Causes skin irritation		
H318	Causes serious eye damage		
H319	Causes serious eye irritation		

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Met. Corr. 1	H290	Expert judgment
Skin Corr. 1A	H314	On basis of test data

SDS EU (REACH Annex II)

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